0%). No other significant differences concerning major complications (death or stroke), other cranial nerve injuries, wound healing, or patient satisfaction was observed neither in the early postoperative phase nor at follow up.

Conclusion Due to the high incidence of temporary ipsilateral vocal cord dysfunction in patients undergoing retrojugular exposure of the carotid artery, we recommend the conventional ventrojugular approach, which can be performed by incision along the anterior border of the sternomastoid muscle or by transversal skin incision.

The Creation of the Optimal Dedicated Endovascular Suite

Sikkink C.J.J.M., Reijnen M.M.P.J., Zeebregts C.J. Eur J Vasc Endovasc Surg 2007;35:198-204.

Background During the last decade endovascular therapy has been established as an alternative treatment for a variety of vascular diseases. Neither the classic operating room (OR), nor the conventional angiography suite is optimal for both open surgery and endovascular procedures. Important issues include: quality of the imaging equipment, radiation burden, ease of use of the equipment, need for specially trained personnel, ergonomics, ability to perform both open and percutaneous procedures, sterile environments, as well as quality and efficiency of patient care.

Methods A literature search identified articles pertinent to the key issues during the decision-making process of creating the optimal endovascular suite. Manual cross-referencing also was performed.

Results and conclusion The most important feature of working in a dedicated endovascular suite should be the ability to attain best treatment of vascular patients. Whether the interventional radiologist or the vascular surgeon uses the facilities is of less importance. A fixed fluoroscopy unit is preferred, above a portable C-arm. Establishment of an endovascular operating room suite has the benefit of a sterile environment, the possibility of performing hybrid procedures and conversions when necessary. Moreover, angiography immediately before treatment gives contemporary anatomical information, and after treatment provides quality control. As a consequence, better quality and service can be provided to the individual patient.

Conventional Stripping versus Cryostripping: A Prospective Randomised Trial to Compare Improvement in Quality of Life and Complications

Menyhei G., Gyevnár Z., Arató E., Kelemen O., Kollár L. Eur J Vasc Endovasc Surg 2007;35:218-23.

Objectives To assess the improvement in quality of life and complication rates in patients undergoing great saphenous vein (GSV) stripping using two different techniques.

Design A single centre prospective randomised trial.

Patients and methods 160 patients with primary varicose veins and GSV incompetence were randomised to either conventional stripping or cryostripping combined with phlebectomy of varices. Quality of life was assessed as the primary outcome measure prior to surgery and 6 months later, using the SF-36 questionnaire. Operative data, pain score and procedure related complications were evaluated as secondary outcome measures. We assessed the area of bruising and symptoms attributable to saphenous nerve injury.

Results The number of completely analysed patients was 77 in the conventional stripping group and 69 in the cryostripping group. When comparing the preoperative SF-36 scores to the results after 6 months, there was an improvement in all eight domains, which reached statistical significance in six domains in both groups. The mean area of bruising measured in the thigh was significantly greater in the conventional stripping group (161 S.D. 63 cm^2 versus 123 S.D. 52 cm^2, $p = 0.010$, Student's t test). The number of patients with paraesthesia due to saphenous nerve injury was numerically lower in the cryostripping group at one week [15 (22%), versus 28 (34%), N.S.] but no difference was observed at 6 months. Postoperative pain score evaluation in the evening and 24 hours after the operation revealed no significant difference.

Conclusions The study confirmed significant improvement in quality of life measured by SF-36 questionnaire after both conventional and cryostripping with no difference between the two stripping techniques. Cryostripping results in less bruising than conventional stripping.

Association of Primary Varicose Veins with Dysregulated Vein Wall Apoptosis

Ducasse E., Giannakakis K., Speziale F., Midy D., Sbarigia E., Baste J.C., Faraggiana T. Eur J Vasc Endovasc Surg 2007;35:224-29.

Background Disordered programmed cell death may play a role in the development of superficial venous incompetence. We have determined the number of cells in apoptosis, and the mediators regulating the intrinsic and extrinsic pathways in specimens of varicose vein.

Methods Venous segments were obtained from 46 patients undergoing surgical treatment for primary varicose veins. Controls samples were obtained from 20 patients undergoing distal arterial bypass grafting surgery. Segments of the distal and proximal saphenous trunk as well as tributaries were studied. Cell apoptoses and mediators of the mitochondrial and trans membrane pathway were evaluated with peroxidase in situ apoptosis detection, Bax and Fas detection, caspase-9 and 8 detection in the medial layer.

Results Disorganised histological architecture was observed in varicose veins. Primary varicose veins also contained fewer peroxidase in situ-positive cells than control veins (2.6% S.D. 0.2% versus 12% S.D. 0.93%, $P = .0001$, Mann-Whitney u test), fewer Bax positive cells (2.1.% S.D. 0.3% versus 13% S.D. 0.9%, $P = .0001$) and fewer Caspase 9 positive cells (3.2% S.D. 1% versus 12% S.D. 1.3%, $P = .0001$). Similar findings were observed in saphenous trunk, main tributaries and accessory veins. In patients with recurrent varicose veins in whom the saphenous trunk had been preserved showed similar findings to primary varicose veins. Residual varicose veins contained fewer peroxidase in situ-positive cells than healthy veins (3.2% S.D. 0.6% versus 11% S.D. 2%, $P = .0001$), fewer Bax positive cells (2.2% S.D. 0.3% versus 12% S.D. 0.7%, $P = .0001$) and fewer Caspase 9 positive cells (2.6% S.D. 0.6% versus 12% S.D. 1%, $P = .0001$). Immunohistochemical detection for Fas and caspase 8 remained equal was the same in the varicose vein and control groups.

Conclusion Apoptosis is down regulated in the medial layer of varicose veins. This dysregulation is attributable to a disorder of the intrinsic pathway and involves the great saphenous vein trunk, major tributaries and accessory veins. This process may be among the causes of primary varicose veins.